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Date: 29 Oct 2003

To: William I. Solomon (Reg. No. 28,565)	From: Michael J Feely
Application/Control Number: 10/073,309	Art Unit: 1712
Fax No.: 703-312-6666	Phone No.: 703-305-0268
Voice No.: (703) 312-6600	Return Fax No.: 703-872-9534
Re: Proposed Examiner's Amendment	CC:
<input type="checkbox"/> Urgent <input checked="" type="checkbox"/> For Review <input type="checkbox"/> For Comment <input type="checkbox"/> For Reply <input type="checkbox"/> Per Your Request	

Comments:

Mr Solomon,

Attached are my proposed changes for US SN 10/073,309 (Docket No. 511.41182X00). Also included are comments regarding each claim. Please review these proposed changes. If you have any questions or concerns, please contact me at 703-305-0268.

Michael Feely

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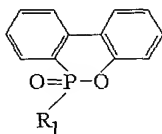
Proposed Examiner's Amendment for 10/073,309

1. A resin composition comprising:

an epoxy resin,

an amine-type curing agent,

an organophosphorous compound having a structure represented by formula 1:



Formula 1

wherein R₁ is an aryl radical with two hydroxyl groups, and the aryl radical can be substituted by one to three lower alkyls, and

an organic solvent;

wherein the resin composition has been compounded at a temperature of 50°C or lower, so as to inhibit reaction of said epoxy resin and said organophosphorous compound in the resin composition during compounding.

****Comments:** on lines 12-18 of page 7 of the Specification, Applicant discloses, "The compounding ratio of the epoxy resin, the amine-type curing agent, the organophosphorous compound having the structure represented by formula 1, and the organic solvent can be determined from the viewpoint of proper maintenance of the properties of cured products resulting from curing these ingredients, especially, heat resistance, hygroscopicity and flame retardancy." Based on the disclosure, this embodiment of the invention would be more accurately described in terms of compounding the entire composition, as opposed to just the epoxy resin and the

organophosphorous compound. The claim language would also clearly overcome the prior art. Although Sagara et al. appear to initially mix (compound) an epoxy component and an organophosphorous component at a low temperature prior to heating the mixture to an elevated reaction temperature, the reference does not teach compounding all four of these ingredients at a temperature below 50°C.

12. A printed wiring board comprising *the laminate according to claim II, wherein an unnecessary part of the laminate has been removed by etching.*

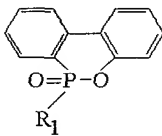
****Comments:** the current language appears to lack essential elements – it is unclear how the recited substrate can constitute a printed wiring board. The proposed language is taken from lines 4-11 of page 12 of the Specification.

13. A method for producing a resin composition comprising *the step of compounding the following components:*

an epoxy resin,

an amine-type curing agent,

an organophosphorous compound having a structure represented by formula 1:



Formula 1

wherein R₁ is an aryl radical with two hydroxyl groups, and the aryl radical can be substituted by one to three lower alkyls, and
an organic solvent;

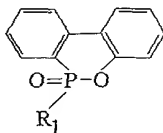
wherein *the compounding step* is performed at a temperature of 50°C or lower, so as to inhibit reaction of said epoxy resin and said organophosphorous compound in the resin composition during compounding.

****Comments:** these changes are proposed for the same reasons set forth regarding claim

1. In addition, the current language lacks a defined process step. Accordingly, the proposed language recites the step of compounding the composition.

14. A method for producing a resin composition comprising *the steps of:*
reacting an epoxy resin with an amine-type curing agent in an organic solvent at a temperature of from 80 to 140°C to form a reaction product, whereby bringing the epoxy resin and the amine-type curing agent into a state where they are mutually compatible in the absence of a solvent;
compounding an organophosphorous compound and said reaction product at a temperature of 50°C or lower, so as to inhibit reaction of *said reaction product* and said organophosphorous compound in the resin composition during compounding;
wherein said organophosphorous compound has a structure represented by

formula 1:



Formula 1

wherein R₁ is an aryl radical with two hydroxyl groups, and the aryl radical can be substituted by one to three lower alkyls.

****Comments:** these proposed changes are made to clearly outline the process steps of the invention. Regarding the compounding step in this embodiment of the invention, the reaction of interest would be taking place between the reaction product (of the epoxy resin and amine-type curing agent) and the organophosphorous compound – not the epoxy resin and organophosphorous compound. This embodiment is described in detail beginning on line 2 of page 9 and ending on line 4 of page 10 of the Specification.

19. (Cancelled)

****Comments:** the current claim language fails to further limit the composition of claim 1.

20. The resin composition according to claim 1, wherein the reaction of said epoxy resin and said organophosphorous compound is inhibited such that a ratio of amount of organophosphorous compound that has reacted with the epoxy resin to the amount of unreacted organophosphorous compound is at most 0.5%.

****Comments:** the proposed language incorporates both the limitations of claim 19 and claim 20. The language “prior to use thereof in forming a prepreg” is omitted because the intended use provides no limitation to the composition itself.

37. A printed wiring board comprising *the laminate according to claim 36, wherein an unnecessary part of the laminate has been removed by etching.*

***Comments:* the current language appears to lack essential elements – it is unclear how the recited substrate can constitute a printed wiring board. The proposed language is taken from lines 4-11 of page 12 of the Specification.